

Date: Mon, 27 Sep 93 04:30:15 PDT
From: Ham-Digital Mailing List and Newsgroup <ham-digital@ucsd.edu>
Errors-To: Ham-Digital-Errors@UCSD.Edu
Reply-To: Ham-Digital@UCSD.Edu
Precedence: Bulk
Subject: Ham-Digital Digest V93 #55
To: Ham-Digital

Ham-Digital Digest Mon, 27 Sep 93 Volume 93 : Issue 55

Today's Topics:

 9600 baud radio setup
 Any experience from delta modulation?? (2 msgs)
 Link to Internet
 Modem Facility in NOS???
 Need help w/ nos and wd8003
 News via FM Subcarriers/receiving data broadcasts
 Packet TNC's for sale
 SLIP/MacNet/NOS/ka9q
 TCP/IP Via digi (NOS)

Send Replies or notes for publication to: <Ham-Digital@UCSD.Edu>
Send subscription requests to: <Ham-Digital-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Digital Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-digital".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Sun, 26 Sep 1993 09:54:40 +0000
From: news!demon!llondel.demon.co.uk!dave@uunet.uu.net
Subject: 9600 baud radio setup
To: ham-digital@ucsd.edu

In article <1993Sep25.140026.29435@ke4zv.atl.ga.us> gary@ke4zv.UUCP (Gary Coffman)
writes:

>bit stuffing. We're only interested in the zero crossings in
>order to recover clock and data. A transition during a bit time
>means '1' and no transition means '0'. So upside down signals
>are as good as right side up signals for recovering the zero
>crossings. That's why we have to do bit stuffing BTW, otherwise
>a long string of '0's would mean no transitions and the clock
>would lose synchronization.

>

Haven't you got it upside down? You can't have more than five '1's in normal data without a '0' being added. This would suggest that a '0' is the transition and a '1' is a no-change.

Dave

--

```
*****
* G4WRW @ GB7WRW.#41.GBR.EU AX25      * Start at the beginning. Go on *
* dave@llondel.demon.co.uk Internet * until the end. Then stop. *
* g4wrw@g4wrw.ampr.org Amprnet * (the king to the white rabbit) *
*****
```

Date: 26 Sep 1993 11:46:22 GMT
From: swrinde!cs.utexas.edu!uwm.edu!spool.mu.edu!agate!usenet.ins.cwru.edu!
news.ysu.edu!yfn.ysu.edu!ae674@network.ucsd.edu
Subject: Any experience from delta modulation??
To: ham-digital@ucsd.edu

I think any real time digital voice experiments over radio would be cool.
(at least so you can say you have experimented with digital audio over radio)
But if digital voice is going to become a regular form of communication
for hams (and thats a big IF) it should offer some real advantages over good
old analog FM. One obvious advantage is that you couldn't be received on any
normal FM scanners. Another one that comes to mind is since you wouldn't be
transmitting a phone emission you wouldn't be banned from transmitting
interesting patterns of bits/waveforms&#

But in order for any digital voice to work at all we will need decent high
speed
RF modulation schemes (if using only moderate compression at a good quality).
The important issue is how reliable can you make low bit rate digital audio?
I'm not an expert on digital coding and FEC but I do know a little bit. It
would seem to me that you would run some kind of FEC to eliminate most single
bit errors. After that the delta modulated data would be encoded in a small
block with a few absolute samples and a CRC. If there were byte level errors
that couldn't be corrected by the FEC you would try and linear interpolate
between the nearest samples by computing the other relative samples backwards
from one last absolute sample. I don't think you could have too many byte
level errors before the guess's would get kind of bad. But then you could
just resend the block and eliminate almost all the errors!! (pactor style)
I think this would be pretty incredible if we could do this. I think there
would be only minor delays or hickups when the signals get hard to decode.
Usually when you can't understand an FM comunication you have to ask for
it to be repeated which is at least a 10 sec delay!!

I invite all constructive criticisms (just to get this news group going)

73,

Reid Savage N9SYW ae674@yfn.ysu.edu (my virtual Internet account)

-it doesn't matter where on the Internet it is just as long
can get there some how

Date: Sun, 26 Sep 1993 21:13:20 GMT
From: swrinde!gatech!usenet.ins.cwru.edu!news.ecn.bgu.edu!feenix.metronet.com!
henrys@network.ucsd.edu
Subject: Any experience from delta modulation??
To: ham-digital@ucsd.edu

Erik,

Thanks for your very nice, informative response via email. I am glad
that you understood my question "Help me on this Erik..." as an actual
question (as it was truly meant to be.)

Mr. Coffman, lighten up!

Let the discussions continue, I am enjoying them!

Henry "Smitty" Smith - NA5K

--

Henry B. Smith - NA5K	henrys@feenix.metronet.com
1380 Camino Real	Home phone (214) 562-3049
McKinney, TX 75069	Office phone (214) 333-6077

Date: 23 Sep 93 22:37:37 GMT
From: library.ucla.edu!news.mic.ucla.edu!ctc.com!pitt.edu!dsinc!spool.mu.edu!
sgiblab!wetware!spunky.RedBrick.COM!psinntp!psinntp!vaxa.hofstra.edu!
k12robzj@network.ucsd.edu
Subject: Link to Internet
To: ham-digital@ucsd.edu

I have a friend that operates a VHF packet radio. He is a teacher and would
like to link up to the Internet with his students using packet radio. He has
no modem or phone line. Is there any way he can access Internet with only the
packet radio?

Date: 24 Sep 93 13:13:33 GMT
From: library.ucla.edu!news.mic.ucla.edu!ctc.com!pitt.edu!dsinc!spool.mu.edu!
howland.reston.ans.net!news.ans.net!newsgate.watson.ibm.com!
hawnews.watson.ibm.com!news@network.ucsd.edu
Subject: Modem Facility in NOS???
To: ham-digital@ucsd.edu

In <1993Sep23.123642.13611@e2big.mko.dec.com>, robin@ayjen1.enet.dec.com ()
writes:

> I was wondering if there was a dialup modem facility in nos capable
> of

The last couple of versions of JNOS have had something called TIPMAIL.
You can start TIPMAIL up on a MODEM Port and callers will be presented with
a userid: and Password: prompt when they call up. They can then use
XMODEM to download binary files or use the Download command to display and
capture ascii type files. TIPMAIL works with callers using standard comm
programs like ProComm or TE/2.

Another option would be for them to use SLIP to establish the
connection. This could give them access to the radio ports from their home
system via the phone line in addition to FTP, SMTP, ETC.

73's de Jack - kf5mg
AX25net - kf5mg@kf5mg.#dfw.tx.usa.na - (817) 962-4409
AMPRnet - kf5mg@kf5mg.ampr.org - 44.28.0.14
Internet - kf5mg@vnet.ibm.com

Date: Sun, 26 Sep 1993 19:35:00 GMT
From: dog.ee.lbl.gov!agate!spool.mu.edu!mixcom.com!Glenn.Butzlaff@network.ucsd.edu
Subject: Need help w/ nos and wd8003
To: ham-digital@ucsd.edu

Hello to the Network

I recently bought 2 wd8003s LAN cards at a swapfest. I havent any
experience with this hardware, and I want to run these cards in
2 dos boxes running wg7j nos. First question...how to set the base
address for the card? The irq settings look straight-forward enough.
Second, where can I find the driver for this card. I am also
assuming that I can run the UTP between the machines once set up and
have them talking. If Im wrong please let me know. Any help/info
will be greatly appreciated. Thanks in advance.

Glenn Butzlaff / we9k
we9k@we9k.ampr.org 44.92.1.52

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Date: Mon, 27 Sep 1993 03:52:16 GMT
From: sdd.hp.com!nigel.msen.com!spool.mu.edu!wupost!csus.edu!netcom.com!
jubo@network.ucsd.edu
Subject: News via FM Subcarriers/receiving data broadcasts
To: ham-digital@ucsd.edu

Hi all--

Anyone out there have any experience getting news & stock info via FM
subcarrier?

Most of the wire services are now sending stories out this way, as are lots
of smaller, specialized information services.

Some of this info appears to be encrypted; anyone know anything about
that? What are the best receivers & software packages?

Thanks.
Jeff Ubois
jubo@netcom.com

Date: 26 Sep 93 19:14:09 GMT
From: ncar!vexcel!copper!mercury.cair.du.edu!mnemosyne.cs.du.edu!nyx!
rchalk@ames.arpa
Subject: Packet TNC's for sale
To: ham-digital@ucsd.edu

I have the following for sale:

1-AEA PK-232MBX, all accessories, manuals, software. Good cond.

Asking \$250.00

1-Kantronics KPC-4, with 2400 baud modem installed. No accessories, but all ma
Manuals included. Good condition.

Asking \$90.00

e-mail for details, or to make offers.

Richard

Date: 27 Sep 93 07:14:44 GMT
From: dog.ee.lbl.gov!agate!spool.mu.edu!news.clark.edu!netnews.nwnet.net!henson!
beaker!n9244588@network.ucsd.edu
Subject: SLIP/MacNet/NOS/ka9q
To: ham-digital@ucsd.edu

I have MacNet for the mac, same basic program as ka9q's and seem to be having difficulty using it in slip mode. The program doesn't seem to be communicating w/ the modem (a zoom 2400 fax modem). I have scrounged through the manuals and the help files and nothing seems to work.

Machine: LCII

73

Tollef

Tollef Winslow, KB7DNS | The thoughts expressed here are the sole
voice - (206) 650-2521 | product of my mind, the rest of my body takes
data/fax - (206) 650-2038 | no responsibility for the above stated.

I apologize for the confounded number but the Western Washington Mental Institution to which I am committed doesn't believe in humans, only numbers.

Date: 22 Sep 93 02:33:39 GMT
From: pacbell.com!iggy.GW.Vitalink.COM!wetware!spunky.RedBrick.COM!psinntp!
psinntp!ncrgw2.ncr.com!ncrhub2!ncratl!broccoli!dragon!nanovx!wa4mei!ke4zv!
gary@ames.arpa
Subject: TCP/IP Via digi (NOS)
To: ham-digital@ucsd.edu

In article <1993Sep20.114802.19888@cherokee.nsuok.edu> black@cherokee.nsuok.edu (Steve Black (KC5BAU)) writes:

>Is it possible to set up a digipeater to be used when telnetting?
>(Even if the digipeater is not TCP/IP? (Netrom)).

Yes you can. For a simple digipeater, you need to add a manual "arp add" entry to the arp table to include the digi in the path.

Gary

--

Gary Coffman KE4ZV	"If 10% is good enough	gatech!wa4mei!ke4zv!gary
Destructive Testing Systems	for Jesus, it's good	uunet!rsiatl!ke4zv!gary
534 Shannon Way	enough for Uncle Sam."	emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244	-Ray Stevens	

Date: Sun, 26 Sep 1993 22:55:54 GMT

From: sdd.hp.com!caen!uwm.edu!vixen.cso.uiuc.edu!howland.reston.ans.net!
usenet.ins.cwru.edu!news.ecn.bgu.edu!willis1.cis.uab.edu!right.dom.uab.edu!
user@network.ucsd.edu
To: ham-digital@ucsd.edu

References <199309241914.AA206899@freenet.scri.fsu.edu>,
<1993Sep25.140026.29435@ke4zv.atl.ga.us>, <749062480snx@llondel.demon.co.uk>willis
Subject : Re: 9600 baud radio setup

In article <749062480snx@llondel.demon.co.uk>, dave@llondel.demon.co.uk
(David Hough) wrote:

>

> In article <1993Sep25.140026.29435@ke4zv.atl.ga.us> gary@ke4zv.UUCP (Gary
Coffman) writes:

> >bit stuffing. We're only interested in the zero crossings in
> >order to recover clock and data. A transition during a bit time
> >means '1' and no transition means '0'. So upside down signals
> >are as good as right side up signals for recovering the zero
> >crossings. That's why we have to do bit stuffing BTW, otherwise
> >a long string of '0's would mean no transitions and the clock
> >would lose synchronization.

> >

> Haven't you got it upside down? You can't have more than five '1's in
> normal data without a '0' being added. This would suggest that a '0' is
> the transition and a '1' is a no-change.

There are two issues. For a synchronous channel to run properly there
is a set flag character. There is bit stuffing in bit streams to
convert a character that looks like a flag to something special so
the receive end does not get confused. There is also the sychronization
matter. Not that I really know, but I am interested learning about
9600 baud stuff, and I wanted to advertise my ignorance and get the
protocol clear to me. By the way, is the g3ruh setup fsk or afsk, and
why is it that QAM is not supposed to work over a radio (why couldn't
a DSP fix it up?)

Steve Holland

Just taking advantage of the collective wisdom.

End of Ham-Digital Digest V93 #55
